THE AIR RESERVE COMPONENT MEETING THE DEMANDS OF THE 1990S

A MONOGRAPH
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ABSTRACT

THE AIR RESERVE COMPONENT MEETING THE DEMANDS OF THE 1990S by Lt Col Richard M. Zink, USAF, 54 pages.

With the end of the Cold War, the threat of imminent conflict diminished greatly. The United States, no longer immediately threatened by any nation, significantly decreased defense spending and reduced its military forces. However, the number of world crises warranting the use of military forces increased significantly in the 1990s. While the number of contingencies increased, the forces used to deal with them decreased, causing the remaining forces to operate at an extremely high tempo.

The United States Air Force, more than any other US military service, uses its reserve component extensively in daily operations and short notice contingencies. The Air Reserve Component, which is comprised of the Air National Guard and the Air Force Reserve, is a part of nearly every significant Air Force mission. In fact, some specialized mission capabilities reside entirely in the Air Reserve Component. Consequently, due to the high operations tempo in the Air Force, the Air Reserve Component is called upon for unprecedented levels of participation. The time demand required of the individual reservist, particularly aircrew members, currently far exceeds historical levels. The success of the Air Force to accomplish its mission is linked directly to the ability of the Air Reserve Component to meet this high operations tempo

This monograph describes the emergence of the Total Force Concept to illustrate how the Air Force structure developed. Next, it defines the current level of operations and personnel tempo. To determine if the operations tempo is having an affect on Air Reserve Component personnel, three retention areas are examined and compared to historical rates. The rate of separation prior to retirement eligibility, the rate of retirement when first eligible (within one year) versus later than first eligible, and the rate of affiliation to a Selective Reserve for officers separating from active duty are all analyzed for trend information. Potential recruiting sources are then examined to determine if sufficient resources are available for the Air Reserve Component to fill their projected losses. Finally, the monograph provides recommendations to keep the Air Reserve Component viable, and operating at a high tempo through the first decade of the 21st century.

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CHAPTER 1

INTRODUCTION

The United States (US) Armed Forces have been extremely busy in the 1990s. The number of contingency missions involving military use is rising, yet the size of the US military continues to decline. Consequently, the remaining forces are very busy. In his *U.S. News & World Report* Special Report titled *Can peacekeepers make war?*, Richard J. Newman clearly explains the challenges faced by the US Armed Forces operating in the 1990s environment.

> ...The U.S. military can obviously afford to relax the hair trigger posture that became the norm over 40 years in the cold war. U.S. defense funding is roughly equal to that of the next six spenders combined. The once-feared Soviet military has dwindled from 4 million troops in 1990 to a Russian force of 1.2 million—with such problems that it could not defeat a ragtag rebel force in the tiny province of Chechnya in 1995. Analysts think it will be at least 15 years before a 'peer competitor' such as China or a resurgent Russia could challenge the United States militarily. No country now poses a serious threat to American territory.
>
> **More with less.** But in many ways the American military has a uniquely demanding job today. Instead of preparing largely for territorial defense, U.S. troops must safeguard vaguely defined American and global 'interests' in an increasing number of far-flung places. Since 1990, U.S. armed forces have been utilized in 36 foreign missions, compared with just 22 between 1980 and 1989, according to analysis by the Congressional Research Service. And there have been fewer troops and dollars to carry out those missions. Since 1989, administrations of both parties have cut the armed forces by one third and the defense budget by 30 percent, after inflation. The changes were inevitable, with the demise of the Soviet threat, but they still affect the military's ability to meet increasing demands.
>
> The busy pace that results appears to be driving out more experienced service members than ever.[1]

The United States Air Force (USAF), more than any other service in the US Armed Forces, integrates its reserve component extensively in both daily operations and short notice contingencies.[2] The USAF fully embraces the total force concept, which means the USAF's capability is always considered to be the collective abilities of the active component and the reserve component. The Air Reserve Component (ARC) is comprised of the Air National Guard (ANG) and the Air Force Reserve (AFR). Together the ANG and AFR provide approximately thirty-two percent of the total USAF personnel.[3] The ARC is intimately involved in nearly every Air Force mission, and as a result is also feeling the strain of the increased operations tempo experienced during the 1990s. Considering the ARC is designed to be a part-time force, concerns exist about the ARC's ability to operate at a high tempo for extended periods of time. The success of the Air Reserve Component to continue to operate directly affects the United States Air Force's ability to accomplish its mission. Therefore, it is important to analyze if the Air Reserve Component will be able to continue high tempo operations in the future without requiring reserve force activation.

Research Focus

This monograph evaluates the potential of the ARC to continue to operate solely through volunteerism in the high operations tempo environment experienced in the 1990s. The monograph focuses on flying units and pilots. The main research question to be answered is: Can Air Reserve Component flying units sustain through volunteerism the operational commitment level experienced since the 1991 United States Air Force

reorganization? To answer the research question the monograph analyzes two functional subjects, participation levels and sustainability.

In this monograph, volunteering is defined as the time individuals spend on reserve duty without being activated. In other words, no selected reserve call-up or partial mobilization has been declared. Included is time spent in unit training assemblies (UTA), annual tours, personnel days, training periods, and days voluntarily spent on active duty for a specific purpose as long as the period of active duty does not exceed thirty-one consecutive days.[4] In this monograph, the term "reservist" refers to Air Force Reserve personnel and Air National Guard personnel collectively.

The monograph begins by showing the development of the Department of Defense's Total Force Program. The total force concept considers the active component and reserve component capabilities collectively.[5] Next, an explanation is offered as to how the world situation changed in the late 1980s and the 1990s, and how that change has affected use of military force. The way the United States Air Force adapted to the changed world environment is then examined. Then reserve participation levels and sustainability are analyzed.

The amount of participation in reserve activity is identified at the unit and individual levels. First, the level of ARC involvement in the totality of USAF missions is defined by identifying the size and scope of unit contingency and deployment activity this decade. Next, the time demand on individual reservists is defined by analyzing the operations tempo and personnel tempo currently required to accomplish ARC missions. Operations tempo is defined as the number of days a reservist spends on reserve duty in any capacity.[6] Personnel tempo is a subset of operations tempo. Personnel tempo is

defined as the number of days a reservist spends on reserve duty away from his home unit on temporary duty.[7] In other words, operations tempo identifies the total number of days per year an individual performed reserve duty, and personnel tempo identifies the total number of days per year an individual performed those duties away from home.

After defining participation levels, the monograph analyzes the ability of the ARC to sustain the current level of activity. Two main subjects are addressed here, retention and recruitment. The retention issues analyzed define the loss rate experienced by the ARC in the 1990s to identify a positive or negative trend. After defining the loss rate, the potential resources available to the ARC to recruit replacements for future losses are addressed.

With twenty-three years experience observing ARC operational activity, the author contends that by analyzing the following three retention issues the impact of high operations tempo on reservists can be defined. First, the percentage of individuals voluntarily leaving the ARC prior to attaining retirement eligibility is defined. If this percentage is higher than the historical average it indicates mission requirements are stressing the system. By separating prior to retirement eligibility reservists are forgoing a tangible benefit, indicating the cost of reserve participation is exceeding the benefit. Next, the percentage of people retiring from the ARC when first eligible (within one year of eligibility), versus retiring later than first eligible, is examined. Again, if this percentage is higher than the historical average it indicates mission requirements are putting the system under stress. By separating when first eligible, reservists are forgoing an increased tangible benefit (higher monthly retirement compensation) indicating the cost of continued reserve participation exceeds the benefit. Third, the percentage of

people separating from active duty and affiliating with an ARC unit (within 24 months) is assessed. In this case, if the percentage is lower than the historical average it indicates a reluctance to join the ARC, leading logically to a presumption that mission requirements are too demanding. Lower rates of affiliation indicate potential reservists are passing on an immediate tangible benefit, part-time employment, and potential long-term tangible benefit, retirement, because the cost of reserve participation is perceived to exceed the benefit of reserve employment.

Regarding recruitment, the monograph addresses the potential for the ARC to recruit sufficient qualified personnel to replace losses. Historically, the primary resource pool for ARC recruitment is personnel voluntarily separating from active duty under honorable conditions. Over sixty-five percent of ARC pilot accessions come from prior active duty service.[8] Active duty USAF force structure shrunk over thirty percent from 1990 to 1998.[9] Concerns that the active duty force structure is so reduced that sufficient personnel will not be available for ARC needs in the future is also analyzed. Additionally, to determine the ARC's ability to recruit from other than the active duty source, United States Census Bureau data and Department of Defense surveys seeking the propensity for individuals to volunteer for military service are analyzed to determine the future size of the recruitment eligible pool.

Finally, three recommendations are made that the author believes must be immediately implemented or continued to ensure the viability of the Air Reserve Component as a vital, integral part of the Total Air Force through the year 2010. These recommendations address areas of pilot training, mission type orders, and maintaining or improving retention rates. Inclusion of these recommendations in Total Air Force

operations will more fully integrate the USAF active and reserve components as a fighting force. This proposed greater integration will improve what is already the finest integration of active and reserve forces in the Department of Defense.[10]

CHAPTER 2

THE AIR RESERVE COMPONENT'S GLOBAL IMPACT

This chapter examines role played by the Air Reserve Component in the Air Force of the 1990s. To understand today's complete integration of USAF active and reserve component forces, it is necessary to understand the development to the Total Force Program in the Department of Defense and how it was adopted in the Department of the Air Force. Next, a description of the state of world affairs occurs, focusing on the effect the changing affairs had on use of military force this decade. Finally, the capabilities provided by reservists, and demands placed on them are examined.

Emergence of the Total Force

In the late 1960s, President Richard Nixon became enamored with the concept of an all volunteer military force structure. The Vietnam era draft was accused of being racially and socially discriminatory and unfair.[11] Discipline problems were rising in the military as increasing numbers of people opposed to the draft were inducted into the military.[12] In this atmosphere the Nixon administration appointed the Gates Commission "to study the costs and practicability of an all-volunteer force."[13] In February 1970, the Gates Commission reported "compensation could successfully replace compulsion as the vehicle for the manning of the armed forces."[14]

Though the draft did not formally end until 1971, the Nixon administration was already committed to an all volunteer force. Obviously, an all volunteer force would require significantly higher manpower costs than the historic draftee dominated forces. In an era of stagflation, greatly increasing defense expenditures was politically infeasible. Hoping to control the necessarily increasing manpower costs, the Nixon administration studied the potential of leveraging capabilities existing and possible in reserve forces.[15]

Expecting the implementation of an all volunteer force and profoundly aware of fiscal constraints, Secretary of Defense Melvin Laird outlined a new approach for Department of Defense (DOD) administration. In his 21 August 1970 memorandum to the secretaries of the military services, he outlined what came to be known as the total force concept.

> Within the Department of Defense, ...economies will require reductions in over-all strengths and capabilities of the active forces, and increased reliance on the combat and combat support units of the Guard and Reserves.
>
> Emphasis will be given to the concurrent consideration of the Total Forces, active and reserve, to determine the most advantageous mix to support national strategy and meet the threat. A total force concept will be applied in all aspects of planning, programming, manning, equipping and employing Guard and Reserve forces.[16]

The memorandum also outlined a significant change in mission for reserve forces. As described in the book, Citizen Warriors, "It expanded the overall mission of reserve forces to include activation for crises other than general war: 'Guard and reserve units and individuals of the Selected Reserve will be prepared to be the initial and primary source of augmentation of the active forces in any future emergency requiring a rapid and substantial expansion of the active forces.'"[17]

Two years later, Secretary of Defense James R. Schlesinger further emphasized the new direction of the Department of Defense. In his 23 August 1973 memorandum to

the military service secretaries he stated, "Total Force is no longer a 'concept'. It is now the Total Force Policy which integrates the Active, Guard and Reserve forces into a homogenous whole."[18] This policy had broad reaching effects. To meet their new requirement to augment the active forces rapidly during crisis, the reserve forces would naturally have to maintain a higher state of readiness and be better equipped than for their historic role of mobilization for general war. The total force policy required major adjustments within the military services. Stephen M. Duncan, Assistant Secretary of Defense for Reserve Affairs in the Reagan and Bush administrations, believed the early efforts in the Air Force to adopt the Total Force Policy were beneficial. He stated, "While the integration of the Air Force Reserve and Air National Guard with the active air force was proceeding reasonably well, new problems were being encountered in the army and navy."[19] Despite the problems and adjustments, the USAF aggressively pursued implementation of the Total Force Policy. The Air Force, because of the nature of its mission, may have been particularly well suited to the new concept.

The USAF, particularly in flying units, has a unique advantage over the other US military services when dealing with the reserve components. By not having to train in large unit packages, air forces can tailor individual continuation training around a reservist's civilian schedule. The author's extensive aviation experience, including tours of duty scheduling reserve component activity, led to the discovery that it is much easier to find four fighter pilots, or four air refueling crew members, or four airlift crew members available for training events, as opposed to gaining availability of an entire squadron to train. So, many aerospace missions could be trained in small numbers,

sometimes down to individuals. Obviously, this advantage provides great benefits regarding unit readiness levels.

Emphasis on military preparedness and defense spending changed significantly when the Reagan administration came to power. Secretary of Defense, Caspar Weinberger, quickly showed his strong belief in the total force policy by stating reserve components were to be "full partners with their active counterparts."[20] He further told Congress, "We can no longer consider reserve forces as merely forces in reserve...Instead, they have to be an integral part of the total force, both in the United States and within NATO."[21] The rapid buildup of the US military in the 1980s definitely included reserve forces. In fact, reserve forces grew at a significantly greater rate than active forces. Between FY 1980 and FY 1989, active forces increased less than five percent while reserve forces increased nearly 35 percent.[22] Cost savings were obviously the prominent factor driving the skew in force expansion. Lawrence J. Korb, Assistant Secretary of Defense for Manpower and Personnel Affairs, explains the reasoning behind the Reagan administration's cost savings approach.

> The goal is to choose the least costly form of manpower to perform each function within the DoD, subject to accomplishing the tasks at an acceptable level of proficiency.
>
> Over the first term of the Reagan administration, that form of defense manpower which is generally considered to be the least costly—selected reserves—increased the most, while that form which is generally considered to be the most expensive—active military—expanded the least.[23]

The USAF's aggressive approach adopting the total force policy in the 1970s provided an excellent foundation to fully integrate the rapidly growing reserve forces. The expansion was highly successful and resulted in a force structure showing the ARC deeply invested in nearly every major air function.[24] Stephen M. Duncan, Assistant

Secretary of Defense for Reserve Affairs in the Reagan and Bush administrations, praised the state of total force implementation by the USAF at the beginning of the Bush administration.

> The Air Force Reserve and the Air National Guard increased by thirty-two percent and almost eighteen percent respectively between 1981 and 1989. The integration of the air reserve components with the active air force was, in fact, a model for the other services. Most Air National Guard and Air Force Reserve units were aligned with their wartime 'gaining commands' and trained with them on a regular basis in peacetime. In 1989, the Air Force Reserve and the Air National Guard provided a combined ninety-two percent of the U.S.—based strategic interceptor forces, fifty-nine percent of its tactical airlift and fifty-five percent of its tactical air support capability, a third of its tactical fighters, forty-six percent of its tactical reconnaissance, and almost thirty percent of its special operations capability. [25]

In the 1990s, due to a significant active duty force drawdown and the tremendous success of total force integration, the USAF active/reserve ratio in force structure and capability continued to shift in favor of the ARC. The ARC's contribution is even greater in 1998 than what Duncan identified in 1989. For example, the ARC in 1998 provides one hundred percent of US—based interceptor forces, seventy-six percent of tactical airlift forces, and forty-two percent of tactical fighter forces.[26] Another significant change was the increased size of initial responding forces in the ARC.

During a reorganization of the USAF in the early 1990s, the ARC became an even more critical link in the United States' ability to project power globally, when a dramatic decision was made to shift the majority of strategic airlift and air refueling capability to the ARC. In 1998, the ARC possesses fifty-three percent of the strategic airlift and fifty-nine percent of the air refueling forces. The decision to place such a large percentage of strategic airlift and air refueling forces in the ARC is radical because these are early responding forces. For the ARC to respond on short notice with the majority of US

power projection capability enablers requires not only high readiness levels, but near immediate availability of personnel as well. In 1998, the ARC is intimately linked to every operation the USAF conducts.

The World Has Changed

During the decade of the 1990s tremendous changes occurred in the global political environment. Effects of the Berlin Wall collapsing in 1989 reverberated throughout the world. The dissolution of the Soviet Union ushered in a new political atmosphere, one not dominated by the polarity of the Cold War.

Though daily tensions experienced in a bipolar world under the threat of potential imminent conflict are gone, the result is a much more diverse political situation. A world developed where regionalism and ethnicity dominate politics under the umbrella of a global marketplace. The threat of superpower confrontation, particularly nuclear war, is significantly lessened when compared to the period 1950 to 1985. Yet the world remains a dangerous place. Brutal ethnic or tribal warfare occurred in Bosnia-Herzegovina, Rwanda, Serbia, Iraq, Somalia, Sudan, and Sri Lanka. Religious warfare in India, Algeria, and the Middle East continues. Countries such as Canada, Spain, and Russia are experiencing potential partition with the rise of national or ethnic conscience, while countries such as Romania, Ukraine, Estonia, and Georgia are struggling to establish viable, self sustaining governments and economies after the failure of communism. Civil wars raged on the European, African and Asian continents, and terrorism continues to inflict death and destruction throughout the world. Illegal drug cartels continue smuggling their products, and for their own protection aggressively work to corrupt

governments. Additionally, due in large part to the remarkable advances in electronic media, the world's population is much more acutely aware of intense human struggles caused by the ravages of utter destitution in Sub-Saharan Africa or natural disasters worldwide.[27]

Naturally, the international military environment has been profoundly affected by the world's economic and political changes. With the threat of imminent conflict greatly reduced, nations have significantly cut defense spending. Nations have also reduced the size of their military forces and restructured them to focus on crisis management and peace keeping operations rather than full scale war.[28] For example, since 1990, NATO countries decreased defense expenditures by twenty-two percent. The proportion of defense spending decreased to only 2.8 percent of their collective Gross Domestic Product (GDP), down from 4.1 percent.[29] NATO force size has reduced proportionally. In the United States defense spending declined thirty-four percent from 1987 to 1997.[30] Current budget proposals project FY 2002 defense spending to be only 2.8 percent of US GDP, the lowest level since the 1930s.[31] Concurrently, US military force size has reduced. Total Department of Defense (DOD) manpower, including active component, reserve component, and full time civilians, dropped from over 4.1 million in FY 1991 to under 2.8 million in FY 1998.[32]

There is a dichotomy between a world experiencing an increasing number of crises warranting the use of military forces and the significant reduction in the size of those forces. The remaining forces will be very busy. For example, major peace operations conducted from 1992 to 1995 increased more than 300 percent from a decade earlier, 1982 to 1985.[33] Nowhere is this truer than in the US. The prominent

international leadership role the US plays as the only remaining superpower requires active participation in crisis resolution. Consequently, US armed forces are involved in nearly every significant international military action across the globe.

The USAF Adapts

The United States Air Force, with its inherent ability to rapidly project and apply force globally, is critical to the success of nearly every US contingency operation. However, like all the other services, it was not protected from force structure reductions. USAF active duty personnel dropped over twenty-seven percent from 510,000 in FY 1991 to 372,000 in FY 1998. This is down from a twenty year high of 608,000 in FY 1986.[34] The Air Reserve Component also lost personnel authorizations between FY 1991 and FY 1998. The Air National Guard dropped ten percent from 118,000 to 107,000, while the Air Force Reserve dropped over thirteen percent from 84,000 to 73,000.[35] While the force size reduced, the number of regional crises increased, placing greater demands on the remaining forces. The number of crises the ARC participated in increased dramatically in the 1990s. From 1953 to 1990 (thirty-eight years), the ARC was involved in eleven contingency operations, but from 1991 to 1997 (only six years), the ARC was involved in over forty contingency operations.[36]

USAF leaders, recognizing the growing dichotomy between the number of contingency operations and reduced force structure, decided in 1990 to significantly reassign assets and missions between ARC and active component forces. Their goal was to maintain as much combat capability as possible within the reduced budget. The restructure was designed to best match capabilities inherent in the two components.

Each component has strengths and weaknesses. The strengths of active component forces are constant high state of readiness and ability to immediately respond to crisis situations. The weakness is the high cost to maintain standing forces. Generally, sufficient active forces are maintained to *immediately* deploy and employ military power globally, and operate for sustained time periods. The advantages of reserve component forces are the holding of vast military experience and lower cost than standing forces. The disadvantages are the time required to respond with significant force size and the time demand on the individual reservist to maintain combat ready skills. In general, sufficient reserve forces are maintained for missions that can be operated from home station in the US, and deployed missions allowing advanced notice for assembly and preparation of personnel. Preferably the deployed missions involving reserve forces occur only over short time periods or allow rotation of personnel so activation of units can be avoided.

The resulting force structure gave the ARC the majority of forces in key functions, as well as significant force size in nearly every air activity. In fact, the ARC now provides over thirty-two percent of total USAF personnel.[37] Figure one graphically shows the breakout of active, reserve, and guard personnel in the total USAF. Figure two shows the extent of ARC forces in major flying categories. Additionally, several aerospace missions are accomplished solely by ARC forces. For example, the Air National Guard is totally responsible for air defense of the US, and psychological operations aerial intrusion broadcast capability. The USAF capability for weather reconnaissance and aerial spraying resides 100 percent in the Air Force Reserve. Therefore, any need for these specialized missions requires immediate use of reserve

forces. Inevitably, this means nearly every involvement of USAF forces requires the involvement of ARC forces.

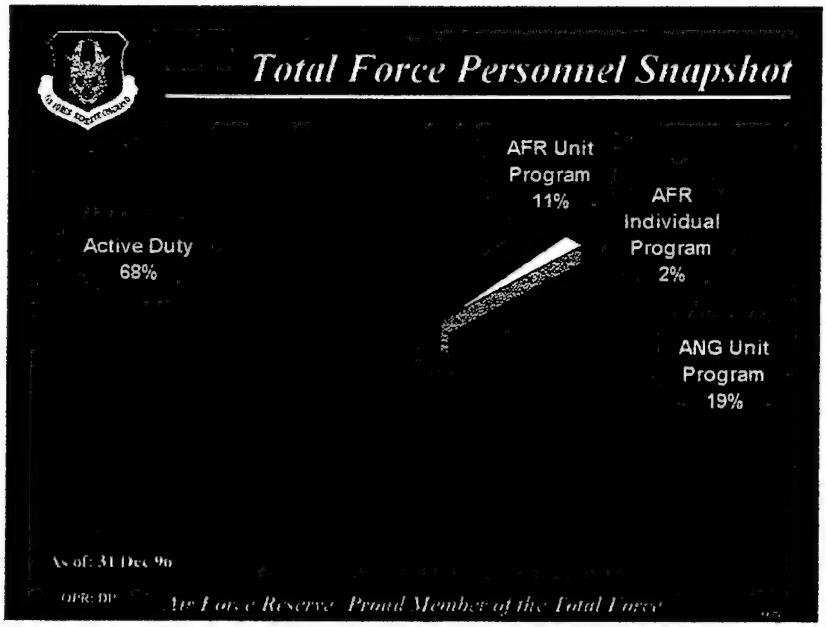

Figure 1[38]

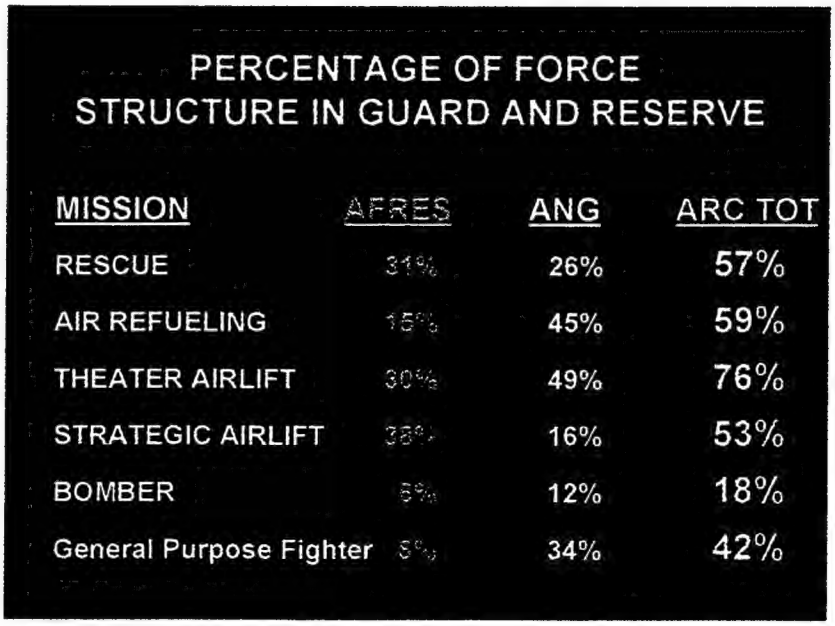

Figure 2[39]

The frequency and scope of reserve use is unprecedented in US history for contingency operations.[40] The USAF, more than any other Service in the US armed forces, uses its reserve component extensively in both daily operations and short notice contingencies. Former Air Force Chief of Staff, General Ronald R. Fogleman explained the increased use of reserve forces this way.

> Since the end of the Cold War, the Air Force has stepped up to an operating tempo (OPTEMPO) four times that of the Cold War, and at the same time we're going through base closures and force drawdown. Over and above our existing forward presence, on an average day in 1996, about 13,700 Air Force men and women were deployed on contingency operations and missions ranging from combat in Bosnia and Iraq, to humanitarian aid in Africa and the Caribbean. Air Force (AF) capabilities are in demand around the world, and we have taken a series of steps to sustain this tempo. One such step is to increase utilization of the Air National Guard (ANG) and Reserve across traditional and non-traditional mission areas and integrating them more closely with their active-duty counterparts. Our National Guard and Reserve forces are truly a force multiplier that we have made a full partner in our day-to-day operations as well as contingency operations. The Air National Guard and Air Force Reserves continue to be an attractive investment because of their low costs, modest manpower requirements and high state of readiness.[41]

Consequently, the USAF's high operations tempo in the 1990s naturally resulted in unprecedented operational requirements in the ARC, and unprecedented necessity to keep a fully capable Air Force Reserve and Air National Guard constantly available. The ARC is so vital to the USAF today that an inability to maintain satisfactory levels of qualified personnel in the ARC would have an extremely pronounced negative effect on the USAF's ability to accomplish its mission.

A Busy Decade

The decade that has seen the greatest ever continual use of air reserve forces began with tremendous ARC involvement in the Gulf War. In the ANG alone, twenty-

nine units of various sizes up to wing level volunteered to be brought on active status for Gulf War duty.[42] An additional eighty-two were mobilized without volunteering.[43] Units were mobilized as early as 24 August 1990 and demobilized as late as 1 August 1991.[44] More than 34,300 ARC personnel volunteered for or were called to active duty for Operations DESERT SHIELD and DESERT STORM.[45] This was the first mobilization of the reserve component under the total force policy.

Mobilization of ARC units was very successful, and the combat and combat support operational performance of participating units was unquestioned. John T. Correll, Editor in Chief of Air Force Magazine, highlights, "... all of the activated reserve flying units mobilized in twenty-four hours or less and were prepared to deploy -- or did deploy – in less than seventy-two hours."[46] USAF flight operations intimately involved active, guard, and reserve units. The Air Reserve Component provided seventeen percent of USAF forces deployed to the Gulf War.[47] Reservists and active duty members worked side by side, often sharing duties, in a seamless total force effort. The large scale of reserve force mobilization, deployment, and employment proved the successful marriage of active and reserve air components. The USAF portion of DOD's Total Force Policy, begun in the early 1970s, was validated twenty years later in the Gulf War.

The validation did not end with victory over Iraq. In the Spring of 1998, over seven years after Iraqi forces were ejected from Kuwait, ARC units are still participating in Operations SOUTHERN WATCH and NORTHERN WATCH (previously Operation PROVIDE PROMISE), enforcing the United Nations mandated no fly zones over southern and northern Iraq. Operations SOUTHERN WATCH and NORTHERN WATCH began immediately with the cessation of Gulf War hostilities in February 1991.

Large deployed force packages of combat and combat support aircraft are required to maintain air supremacy for these operations. The ARC has continuously participated in operations in the Middle East since the beginning of Operation DESERT SHIELD. Twice, in response to Iraqi aggressive military posturing, the ARC has significantly increased its Middle East activity either by deploying combat forces to the theater or actively supporting forces through air refueling and strategic airlift. The first response, Operation VIGILANT WARRIOR, occurred between September 1994 and February 1995.[48] From November 1997 through February 1998, the ARC was aggressively involved in Operations PHOENIX SCORPION and PHOENIX SCORPION II.[49] In both cases, ARC forces were key contributors to the coalition effort forcing Iraq to cease its hostile activities.

From the beginning in 1993 through 1998, ARC forces have participated in peace keeping and combat operations in Bosnia-Herzegovina. ARC flying units participated in Operation DENY FLIGHT, controlling the UN mandated no fly zone over Bosnia-Herzegovina.[50] They conducted combat operations in Operation DELIBERATE FORCE, the North Atlantic Treaty Organization (NATO) directed offensive air strikes to force Bosnian Serb compliance with peace accords.[51] And they assisted in peace efforts by again enforcing the Bosnia no fly zone for Operation JOINT ENDEAVOR, transition to peace operations inside Bosnia-Herzegovina, and Operation JOINT GUARD, continued enforcement of Bosnian peace accords.[52]

A large portion of the military's fight against the flow of illegal drugs to the US is borne by the ARC. Throughout the 1990s the ARC participated in the interagency effort to find sources of illegal drugs and halt their transportation. These efforts are

named Operations CORONET OAK and CORONET NIGHTHAWK.[53] They require continual deployment of forces as well as missions flown from the US.

The ARC has also proven adept as a partner providing humanitarian assistance. Domestically, ARC units have supplied critical assistance in the aftermath of natural disasters, including Hurricane Andrew, the worst natural disaster ever experienced by the United States.[54] They have fought forest fires from the air in the western US, and airlifted critically needed supplies for storm victims.[55] They have done the same internationally, for example fighting forest fires in Indonesia, and assisting disaster victims in Japan, Turkey, Russia, India, and the Virgin Islands.[56] In Operation RESTORE HOPE in Somalia, and Operation SUPPORT HOPE in Rwanda they supplied airlift and tanker support.[57]

In addition to all the operational requirements, the ARC is extensively involved in the entire spectrum of exercise activity. Air Force exercises like RED FLAG, US joint exercises like AIR WARRIOR, NATO exercises such as DYNAMIC MIX, national bilateral exercises such as COBRA GOLD with Thailand, and multinational exercises like BRIGHT STAR in the Middle East, and the Partnership for Peace COOPERATIVE series in Europe all involve ARC forces.[58] In nearly every case some degree of deployment by units is required. Rarely can these exercises be conducted from the ARC units' home stations.[59]

With such tremendously tasking operational commitments for what is supposed to be a part time force, finding time to train the force is increasingly challenging. When not involved directly in contingency operations, humanitarian assistance, or exercise activity, ARC forces need to squeeze in time to train their personnel to adequately

perform their missions. Though some training can be accomplished while performing operational missions, often this is not the case.

High commitment rates without adequate training events presents a significant dilemma for the traditional reservist. Time normally spent on reserve duty was spent training. Reserve duty time in the 1990s is generally spent operating not training, so additional time must be found to accomplish specialized training to maintain mission ready status.

This problem is most acute in fighter units. Particularly when deployed to the Middle East or Bosnia, fighters patrol the sky to prevent or deter combat action. Time spent boring holes in the sky making sure nothing bad happens is not time spent flying low level navigation, dropping bombs, or dogfighting. If reserve fighter pilots use their annual tours to perform operational missions, like enforcing the no fly zone over Iraq or Bosnia-Herzegovina, then additional time is needed after returning home to practice the skills to make them a credible threat.[60] Time devoted to reserve duty is currently far above the historic ARC participation levels.[61] For this time to be available requires not only the dedication of the reservist but support from the reservist's employer and family as well.

In his testimony to the Senate in March 1996, Director of the Air National Guard, Major General Donald W. Shepperd, succinctly addressed how the time demands on reservists have dramatically changed.

> ...we used to stay home and train. We still do, but we have taken on new roles. In addition to homestation training, we deploy overseas for training. In the old days, five overseas deployments was a heavy year. This year we did twenty. In addition we take regular rotations to hot spots all over the world in support of our Active duty Air Force. In the old days our Active Air Force was big enough to handle all but the largest of contingencies. Now, we are immediately called

upon to supply major portions of our strategic airlift and tankers for even small contingencies. Our average aircrew participates 110-120 days per year with the Guard, our average support personnel 60-80. [62]

As MGen Shepperd described, the requirements placed on the ARC have skyrocketed. Figure 3 shows the exponential growth in ARC involvement in contingency and humanitarian assistance missions in the 1990s. This dramatically emphasizes the crucial role the ARC now plays in immediate response to US crises, regardless of size.

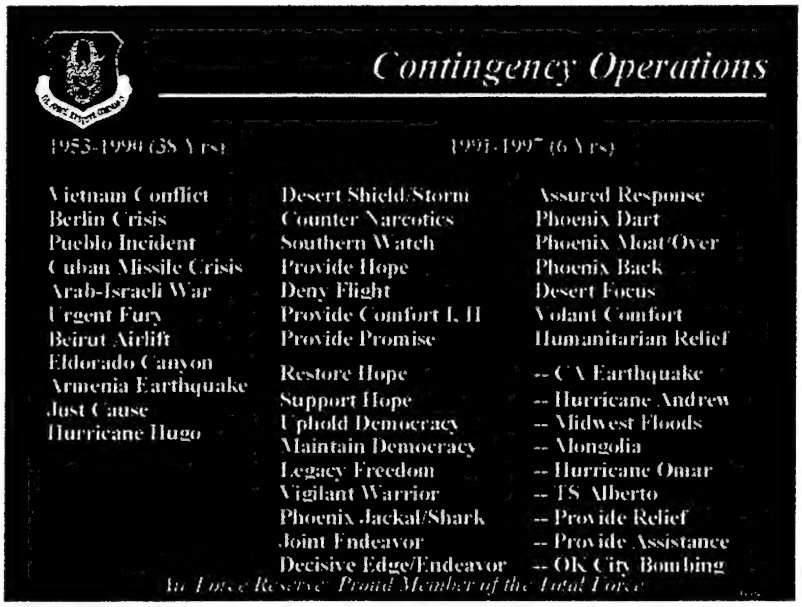

Figure 3[63]

Impact On The Individual Reservist

Units are made of people. People, not organizations or equipment, are the critical element for any successful mission. The increased demand placed on individual reservists in the 1990s has been striking. Continual world crises demanding more frequent deployments, immediate response missions transferred from the active component to the ARC, and increased mission ready training levels designed to match active duty units to ensure the ability to meet the immediate response mission taskings,

all combined to require an increasing amount of time each reservist must devote to reserve duty. Figure four shows the average amount of time AFR flyers spend on reserve duty by mission type. Figure five shows the average amount of time ANG flyers spend on reserve duty by mission type.

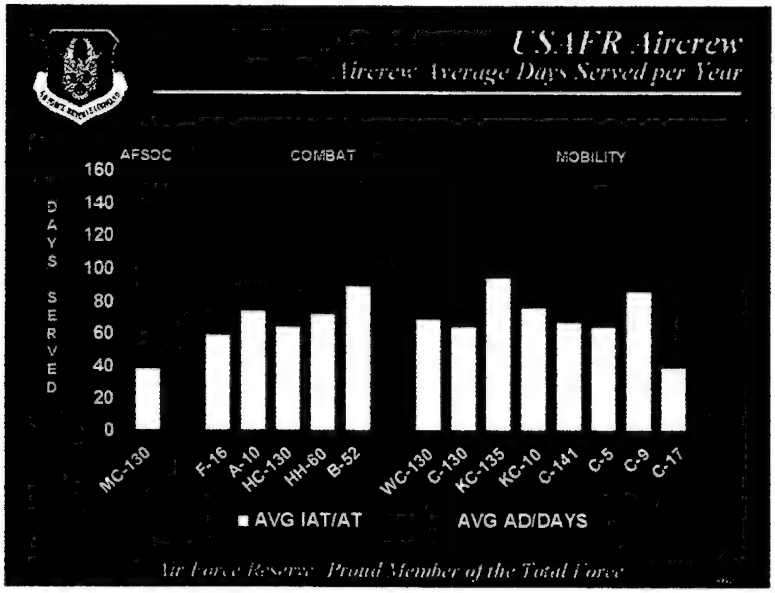

Figure 4[64]

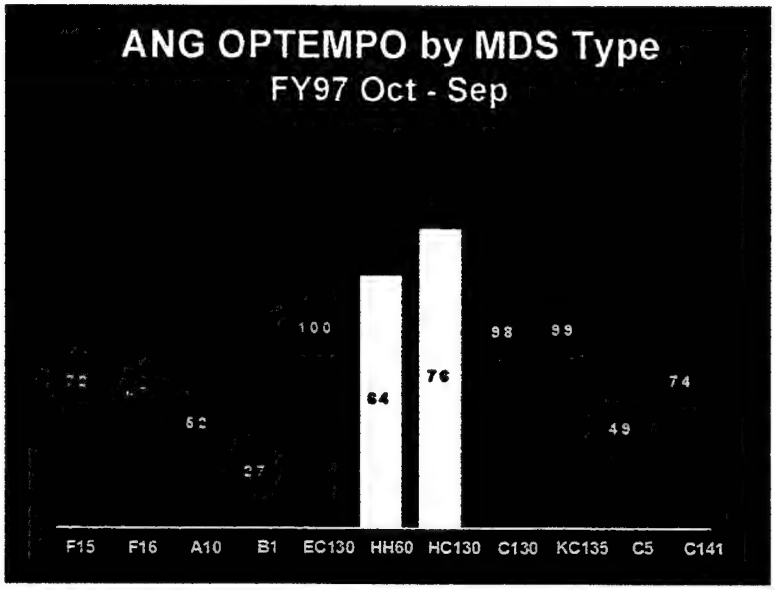

Figure 5[65]

Figure 6 shows the number of days per in FY 1997 ANG flyers were away from home on Guard business. This is defined as personnel tempo.

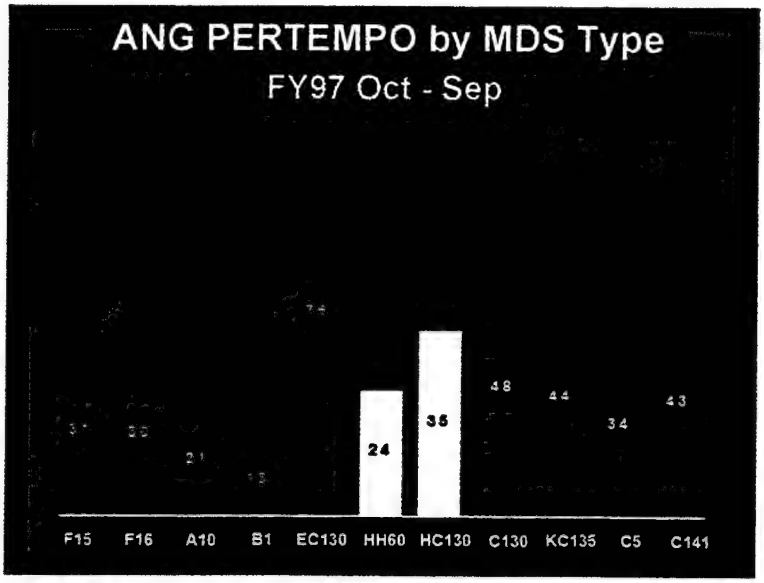

Figure 6[66]

The Challenge of Reserve Duty

With the many ongoing, long-term contingencies affecting the ARC today traditional levels and methods of reserve participation may be inadequate to meet current needs. The ongoing operations, requiring constant deployment of forces, stress the ability of ARC units, as well as active duty units, to execute contingency operations *and* provide continuous force training. This challenge is not likely to go away in the near future. USAF leaders, active and reserve, must design the balance of forces needed for the 1990s high operations tempo, and then employ them properly. Finding the right mix of reserve and active forces, and employing them in the right ratios against the right missions, is as much art as science. It is an art Air Force leaders of the 21st century must master.

Additionally, the Air National Guard has a unique role as state militia. The governor of their state or territory, not the President, is normally their commander in chief, unless they have volunteered for a federal mission or have been activated.[67] As state militia they are the forces of choice to deal with natural disasters.[68] The governor can also task them to restore law and order when civil authorities are unable to do so.[69] Accordingly, the ANG's role as state militia needs to be considered in any tasking decision.

Traditionally, ARC forces have met their peacetime operational commitments by the volunteering of their members to accomplish a mission. Reserve call-ups have historically been limited to major war operations, such as World War II, the Korean War, the simultaneous Berlin and Cuban Missile Crises, and the Gulf War.[70] Some very selective activations occurred during the Vietnam War when the Pueblo Crisis simultaneously occurred.[71] Rarely in the last half of the 20th century have federal activations occurred for lesser contingencies, primarily due to the robust size of active duty forces. However, as already described, the ARC is in great demand due to the reduction in active forces and increased contingency requirements.

Since nearly all reservists have a full time civilian occupation, volunteering for reserve duty comes at the expense of their civilian job or their personal time. So, there is a theoretical limit to a reservist's ability to volunteer and not have the costs of volunteering outweigh the benefits of reserve participation. Additionally, reservists are subject to selected reserve activation for contingency operations if enough personnel are not obtained through volunteerism, or the demands of the mission are greater than what reasonably could be expected to be achieved through volunteerism. The current

operations environment requires extensive individual volunteerism, particularly in flying units where many aircrews exceed 100 days of reserve duty annually.[72]

If ARC units are unable to meet their taskings through volunteerism, USAF leaders will be faced with two short-term options. First, they could choose to shift the taskings to the active component. This is highly undesirable since the active forces already operate at an extremely high tempo and have lost the force structure placed in the ARC that would be needed to absorb additional missions. Second, they could, with presidential approval, activate selected ARC units. This option also has undesirable elements. It requires large numbers of reservists leave their civilian occupations for extended periods. A further negative aspect to activation for the reservist is the loss of control. When volunteering, a reservist can move in and out of their reserve position for short periods of time, thereby pleasing both the civilian employer and USAF simultaneously. When activated, the reservists serve on active duty exclusively, unavailable to their civilian employer, until the activation is cancelled or the USAF releases the individual. Frequent time away from reservists' civilian occupation, particularly on short notice, can make even the most patriotic of employers grow weary of their reservist's absence. Though protected from loss of their job during activations, law does not protect reservists when volunteering for duty, so excessive time away from their civilian employment could result in loss of their job or slowed career advancement.[73]

The contingency missions required of the Air Reserve Component in the 1990s are unprecedented in size, frequency, and duration. Both the Air National Guard and the Air Force Reserve succeeded each time they were tasked. To accomplish success,

individual reservists exceeded the traditional rate of reserve duty by a wide margin. The remainder of this monograph evaluates whether the Air Reserve Component can continue to operate at such a high tempo in the future.

CHAPTER 3

KEEPING THE AIR RESERVE COMPONENT VIABLE

For any complex organization to remain viable recruiting and retaining high caliber talent is necessary. The Air Reserve Component is no different. The talented personnel voluntarily serving reserve duty are the critical element generating military success. This chapter first looks at the current status of officer retention in the ARC to determine if high operations tempo is creating a positive or negative trend. Next an analysis of the future recruit atmosphere is conducted to determine if adequate resources will exist to meet the ARC's pilot requirements early in the next century.

Retaining Top Quality Reservists

Retaining top quality personnel in the Air Force Reserves and Air National Guard is naturally a very high priority for United States Air Force senior leaders in both the active and reserve components. The importance of the Air Reserve Component in today's Total Air Force is obvious since thirty-two percent of all United States Air Force personnel come from the reserve component and many functions reside entirely in reserve units.[74] Retaining motivated, well-trained people in the ARC has a direct link to the ability of the USAF to accomplish its missions.

The large amount of time reserve pilots must now devote to reserve duty may work against a pilot's desire to stay in the ARC. The increased time demand recently experienced by reservists exceeds any such demand since the start of the Total Force program. Figure seven pictorially shows the affect reserve participation has on the lives

of support and aircrew personnel. According to *National Guard Magazine*, during the tenure of recently retired Director of the Air National Guard, Major General Donald Shepperd, "...the Air Guard has been involved in missions worldwide at an operations tempo (OPTEMPO) one could never imagine 10 years ago." [75] In 1993, then Chief of the Air Force Reserve, Major General John J. Closner, predicted that the increased requirements for reserve duty may have a negative effect on retention.

> Last year, Reservists gave the Air Force an average 80 days a year—twice as many as they are required to do. Reserve aircrews served from 100 to 175....These higher demands could eventually take a toll on our recruiting and retention efforts. Pressures from families and employers will have an effect, and we may lose good people. Replacing Reservists with experienced people will become more difficult as the pool of trained personnel leaving active duty dries up. [76]

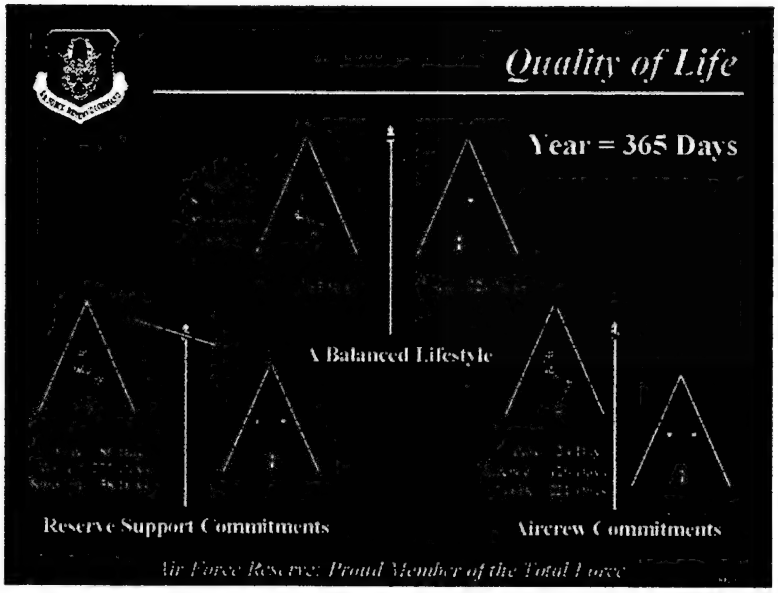

Figure 7[77]

Addressing the Reserve Officer Association in July 1995, Major General Robert A. McIntosh, Chief of the Air Force Reserve, eloquently explained why retention of qualified reservists is so important.

> The most important part of the Air Force Reserve is our people. The Air Force Reserve could not exist without good people, whether they be Reservists themselves, their families or their employers. It is imperative that we maintain a quality of life in the Reserve which will ensure that people want to join us, to stay with us, and to be there when our nation needs them. Reservists give us a large part of their time. We ask a great deal from them and get it. Compensation for a job well done often involves more than a paycheck.
>
> Quality of life is as much a readiness issue as is modernization, operation tempo or flying safety. As expectations of Reserve participation increase, it is important to remember that our Air Force Reservists are all volunteers—their service to the nation is not compulsory. We must treat our Reservists, their employers and their families with fairness and respect. Quality of life issues quickly can become pivotal decision points for Reservists faced with the hard choice of staying in or separating from the service.
>
> Our goal is to recruit and retain the very best people available.[78]

Retention rates are a useful indicator to determine if the Air Reserve Component is being tasked beyond its ability to sustain itself. If retention rates trend below historical levels this may be a key sign the ARC is doing more than its members are able or willing to do. Continuing to operate at a high tempo without taking action to stop a negative trend could put the ARC in a position unable to meet contingency needs. Conversely, if retention trends are the same or higher than historical levels, it is then reasonable to conclude ARC members have not been pushed past the point they are able or willing to participate.

The 1990s Retention Rates

Three retention areas were analyzed against historical levels. The first area was the percentage of reservists separating before retirement eligibility. A higher trend in this

area indicates the demand of reserve duty is higher than reservists are able or willing to accept. The second area was the percentage of reservists retiring when first eligible (within one year) rather than later than first eligible. Again, an upward trend in this area indicates the demand of reserve duty is higher than reservists are able or willing to accept. Third, the percentage of personnel separating from active duty and affiliating with an Air Force Reserve or Air National Guard unit (within two years) was examined. A lower trend in this area indicates a reluctance to join a reserve component unit, presumably due to the high demands currently placed on reservists.

Separating From Reserve Duty Prior to Retirement Eligibility

The long-term tangible benefit reservists earn through participation is military retirement starting at age sixty. Reservists must serve twenty years of good service, including eight in a reserve component, to vest for retirement.[79] During the author's more than twenty years of experience with reserve forces, a variety of reasons both tangible and intangible were observed for participating in the reserves. Intangibly, some members were true patriots and believed they were serving their country, others enjoyed the camaraderie or the excitement of the duty. Tangibly, reservists received paychecks for duty performed, but for many this was more than a demanding part time job. In numerous discussions the author had with reservists, a strong desire to serve long enough to earn military retirement was evident in the vast majority. It logically follows that there must be some very compelling reasons for an individual who originally volunteered to serve reserve duty, and invested so much of their personal time, to separate short of retirement eligibility.

This issue is emphasized even more considering most reservists have already invested time toward retirement serving on active duty. Figure eight shows over sixty-five percent of annual Air National Guard pilot accessions have prior service. Pilots in particular bring extensive prior service time when leaving active duty. They are required to serve on active duty for a minimum of eight years after completion of the year long Undergraduate Pilot Training (UPT) course. So the first time pilots can normally transfer to the Air Reserve Component is when they have accrued at least nine years of service. The incentive to stay for retirement eligibility is therefore normally high.

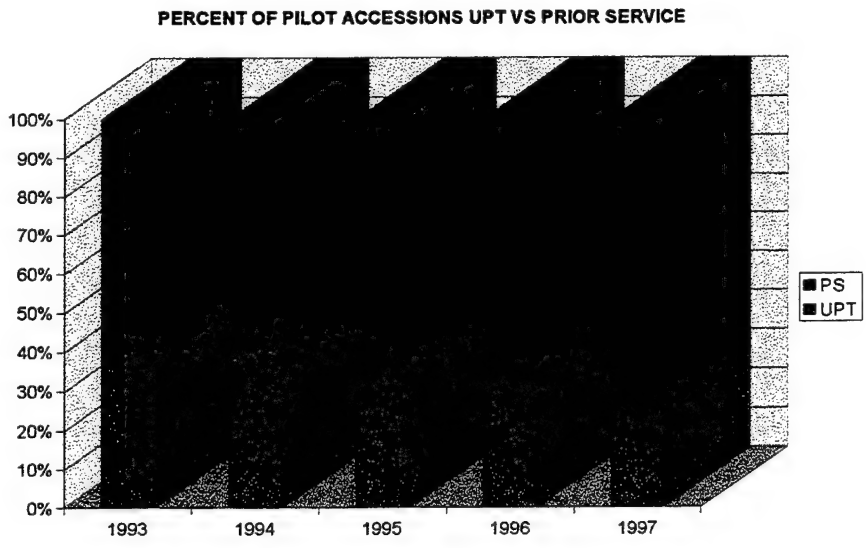

Figure 8.[80]

Analysis of data provided by Headquarters, United States Air Force Reserve Affairs, Personnel Analysis Branch, reveals a slightly higher rate of officer separation in recent years. This slightly negative trend possibly indicates the reserve system is being slightly over tasked. Table one shows the separation rates for officers from FY 91 through FY 97. The higher than normal rate for FY 91 most likely represents a post-Desert Storm reaction from the long-term activation of high numbers of reservists.[81]

Though a larger number of officers have separated in the last three years (FY 95-97) than the previous three years (FY 92-94), the overall rate of separation in the last three years nearly mirrors the decade's average of 7.6 percent. Removing the unusually high separation rate experienced in FY 91 from the data presents a more accurate picture of the effect of recent high operations tempo. Table two shows the data with FY 91 removed. Though still slight, a more obvious negative trend is observed in the last three years. This data indicates that the rate of separation before retirement eligibility is rising. This increase is slight and by itself is not deemed significant, though the negative trend warrants monitoring.

	Number of Officers Separating	*Percentage of Officers Separating*
FY 91	1209	10.18%
FY 92	830	7.48%
FY 93	676	6.09%
FY 94	790	6.83%
FY 95	886	7.57%
FY 96	886	7.69%
FY 97	888	7.6%
Average	**881**	**7.6%**

Table 1[82]

	Number of Officers Separating	*Percentage of Officers Separating*
FY 92	830	7.48%
FY 93	676	6.09%
FY 94	790	6.83%
FY 95	886	7.57%
FY 96	886	7.69%
FY 97	888	7.6%
Average	**826**	**7.21%**

Table 2[83]

Retiring When First Eligible

Once attaining retirement eligibility, reservists have a range of years within which they can opt to retire. The minimum requirement is twenty years of good service with at least eight in a reserve component. The maximum time, known as high year tenure (HYT), varies by rank up to a total of thirty years. For example, lieutenant colonels reach high year tenure at twenty-eight years of commissioned service, but colonels are allowed thirty years. As an incentive to keep highly experienced individuals in the total force, the percentage of retired pay earned increases with each additional year served. If the rate of individuals retiring when first eligible is increasing, then it is reasonable to assume there are current compelling reasons not to remain in the Air Reserve Component.[84]

Analyzing the data provided by the Air Staff Reserve Affairs, Personnel Analysis Branch, a slight but consistently rising increase in officers retiring when first eligible was discovered. This trend also indicates the current tasking level is possibly stressing the Air Reserve Component. Table three shows the number of officers retiring when first eligible during FY 91 through FY 97, as well as the percentage of officers choosing to retire when first eligible. The rate increase may also show a tolerance by officers to continue participation in the short term to earn retirement, but an unwillingness to continue such a hectic pace in the long term. Comparing the last three years, FY 95-97, with the three previous years, FY 92-94, a twenty-two percent increase occurred in first eligible retirements.[85] This comparison shows a much more pronounced increase in officers opting to retire as soon as possible. Though the rate of officers choosing to retire when first eligible is clearly rising, the rate viewed in isolation is not alarming because the total numbers are relatively low. However, when coupled with the increased rate of

separations prior to retirement eligibility, the ARC is losing more than forty-nine additional officers annually between FY 95 and FY 97 than was experienced between FY 92 and FY 94.[86] That is on top of already increased rates of separation and first eligible retirement.[87]

	Number of Officers Retiring When First Eligible	*Percentage of Officers Retiring When First Eligible*
FY 91	104	12.38%
FY 92	92	11.26%
FY 93	97	13.29%
FY 94	99	14.91%
FY 95	124	17.89%
FY 96	122	18.65%
FY 97	120	18.63%
Average	**108**	**15.31%**

Table 3[88]

Affiliating With Air Reserve Component Units

Many United States Air Force officers choose to actively participate in reserve duty after separating from the active component. Officers separating from active duty serve a mandatory period of duty in the reserve component. The mandatory period is served in an inactive status unless the officer chooses to actively affiliate with a reserve component unit. The reserve component offers an enticing degree of stability, in the form of regular part time income, for people going through major career changes. If Air Reserve Component units are being tasked beyond their ability to sustain the operations tempo, it is reasonable to conclude fewer people would choose to affiliate with an ARC unit after leaving active duty.

Analysis of the data provided by the Air Staff shows a steady increase in the affiliation rate from FY 90 through FY 96, with the exception of FY 92. Table four

shows total number of officers eligible to enter the reserve component, defined as the recruit pool, separating from active duty in FY 90 through FY 97. Also shown are the raw number and percentage of officers who affiliated within two years. The anomaly of FY 92 is probably caused by two significant factors working against each other. The active duty Air Force was rapidly reducing its total personnel, while the Air Reserve Component was rapidly trying to absorb new missions or convert existing units to new missions. Therefore the ARC was simply unable to absorb the thirty percent increase in officers available that year.[89] Other than in FY 92, the data clearly supports an increase in affiliation with an ARC unit within two years of separating from active duty. The high operations tempo does not appear to create an aversion to affiliating with a reserve component unit.

	Recruit Pool (Officers Separating From Active Duty	*Number of Officers Affiliating*	*Percentage of Officers Affiliating*
FY 90	4,925	845	17.2%
FY 91	4,220	616	17%
FY 92	6,025	760	12.6%
FY 93	6,460	1,189	18.4%
FY 94	1,905	380	19.9%
FY 95	2,696	528	19.6%
FY 96	2,483	542	21.8%
FY 97* (only reflects one year)	2,667	488	18.3%

Table 4[90]

Pilots leaving active duty tend to affiliate with a reserve component unit at a higher rate than officers do in general. This greatly benefits the ARC especially when considering the high cost of training and developing a fully qualified military pilot. Table five shows the affiliation rate of pilots separating from active duty, and the rate at which those pilots remained in the reserve component for at least four consecutive years.

Again, there is an increase in affiliation rate in recent years. This trend indicates a willingness to join the reserve component despite the high operations tempo. Though the rate pilots remain with the reserves for four consecutive years started to trend down slightly beginning in FY 91, it is still near the historical average.

	Number of Pilots Separating From Active Duty	*Number of Pilots Affiliating With The Air Reserve Component*	*Percentage of Pilots Affiliating With The Air Reserve Component*	*Number of Affiliated Pilots Who Serve Four Consecutive Years in the ARC*	*Percentage of Affiliated Pilots Who Serve Four Consecutive Years in the ARC*
FY 76	336	114	34%		
FY 77	1,403	530	38%	335	63%
FY 78	1,550	657	42%	462	70%
FY 79	2,031	836	41%	640	77%
FY 80	1,335	484	36%	364	75%
FY 81	866	298	34%	225	76%
FY 82	495	195	39%	139	71%
FY 83	319	120	38%	91	76%
FY 84	447	189	42%	126	67%
FY 85	694	328	47%	249	76%
FY 86	717	329	46%	220	67%
FY 87	852	385	45%	250	65%
FY 88	1,038	389	37%	354	91%
FY 89	1,232	518	42%	451	87%
FY 90	1,345	522	39%	472	90%
FY 91	1,569	674	43%	562	83%
FY 92	1,516	802	53%	631	79%
FY 93	822	418	51%	315	75%
FY 94	351	175	50%	116	66%
FY 95	308	133	43%		
FY 96	513	311	61%		
FY 97	582	312	54%		
Average	920	372	40%		76%
Average Last Five Years	515	270	52%		81%

Table 5[91]

Air Reserve Component retention figures show a system currently sustaining itself during high operations tempo. There is a slight increase in officers separating prior

to earning retirement eligibility, and there is a slight increase in officers retiring when first eligible. Both of these negative trends indicate a possibility the ARC is being tasked at or near its maximum rate.[92] These negative trends are countered by an increase in affiliation rate of people separating from active duty. The positive rate is particularly high among pilots. The Air Reserve Component is not experiencing excessive loss rates and appears to be replacing their losses adequately with personnel separating from active duty. The next section examines the resources available to continue replacing the current level of reserve losses.

Recruiting Challenge

Between 2000 and 2010, the Air Reserve Component will face a significant recruiting challenge. Three key issues must be successfully addressed to ensure the ARC recruits enough qualified personnel to meet its pilot requirements. First, the number of military pilots on active duty is declining. Second, airline hiring is expected to remain strong for the next decade. This will place the ARC in direct competition with the airlines for the active duty pilots leaving the USAF. Third, the desire to enter military service is declining among America's youth, complicating the task of hiring non-prior service pilots. How successfully the ARC deals with each of these areas will determine its viability in the early part of the next century.

The ARC's primary source of pilots, officers separating from active duty, is steadily declining. Approximately sixty-five percent of new pilot accessions come from active duty.[93] Unfortunately, the number of pilots on active duty in the United States Air Force continues to decline. In 1990, 19,811 USAF pilots were on active duty.[94] By 1993

the number of pilots on active duty declined to 15,891.[95] In 1998, only 13,410 pilots remained on active duty, a nearly thirty-three percent decrease since 1990.[96] As early as 1992, Major General John J. Closner, III, then Chief of the Air Force Reserve predicted a problem recruiting qualified personnel.

> The year 2000 will find the Air Force Reserve facing its greatest recruiting challenge since the elimination of the draft. As Active Force personnel numbers reduce, so will the pool of trained people with prior military service. Fewer experienced people will come to the Reserve from the Active Force. As a result, we will have to work harder to offset rising training costs and be smarter in the way we recruit new people.[97]

As the military drawdown nears completion another issue appears to be driving the availability of prior service pilots, historically low pilot training production rates. Early in the 1990s the decrease in active duty pilots was driven by the significant drawdown of military forces after the end of the Cold War. Over the next decade the author believes the major factor affecting the number of USAF pilots eligible for Air Reserve Component hiring will be the low undergraduate pilot training production rates from 1992 through 1998. Figure nine shows the dramatic reduction in pilot production that coincided with the active force drawdown of the 1990s. Analysis of this graphic shows that by the year 2000, the year in which the 1992 graduates of pilot training are first eligible to separate, the main source of ARC pilot accessions rapidly diminishes and stays very low for at least the next five years. Figure ten shows the Air National Guard estimate for pilot production to sustain an Air Force active duty pilot force of 14,000. According to the ANG estimate, the active duty USAF failed to produce enough pilots to sustain itself from 1993 through 1998. Consequently, the ARC expects the active

component to aggressively work to keep retention levels high at a further cost to availability of pilots for ARC hiring.

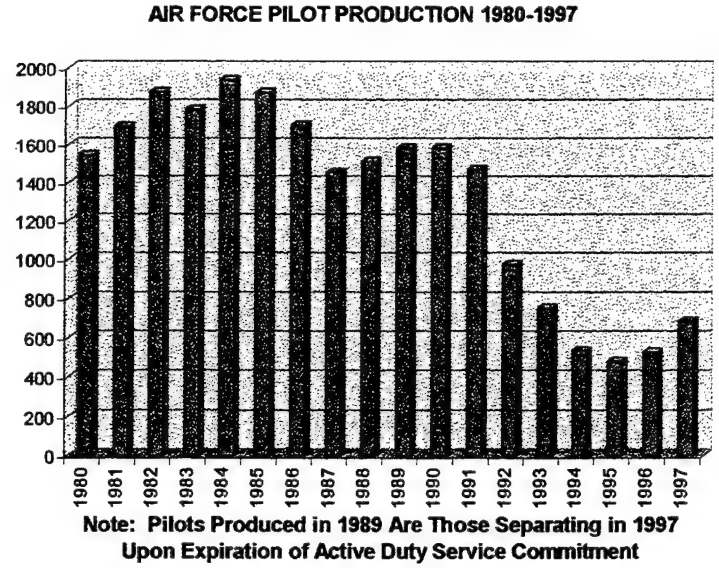

Figure 9[98]

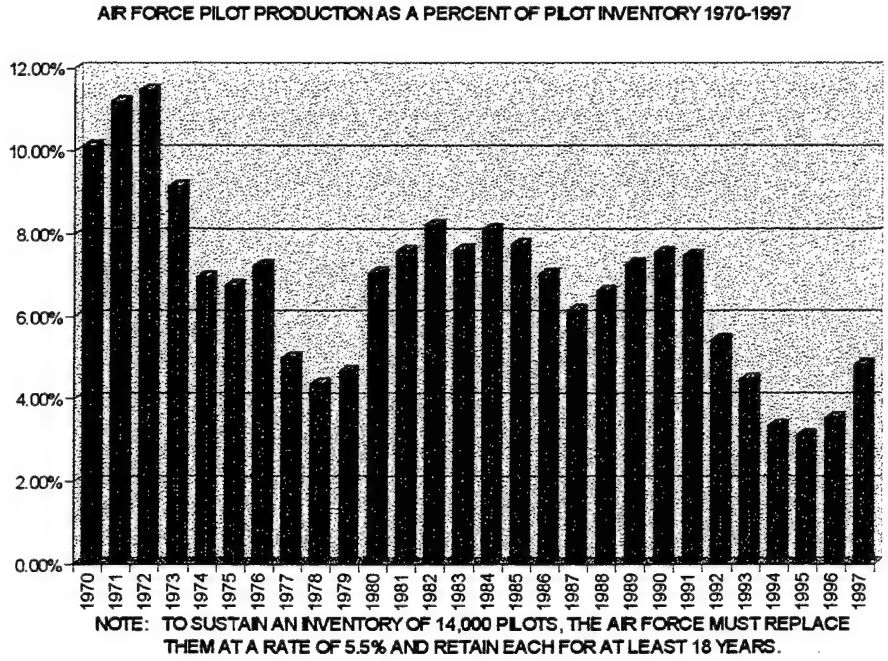

Figure 10[99]

Another factor affecting pilot availability for ARC duty is the airline hiring climate. Kit Darby is President and Publisher of *Airline Pilot Careers* magazine, the industry leader in airline hiring information. Darby claims 1997 the best year in airline hiring history with 11,903 pilots capturing jobs.[100] He further claims, "1998 promises to be another booming year with hiring easily exceeding 1997 levels."[101] The Air National Guard predicts airline hiring will remain strong for a decade.[102] Aggressive airline hiring presents the ARC with a benefit and a problem. On the benefit side, the author has witnessed high rates of pilot separation from active duty occur when airlines are hiring in large numbers, making more pilots potentially available to the ARC. On the problem side, when high levels of airline hiring occur pilots rapidly advance to secure positions in their airline. This security may lead to increased pilot separations from the ARC.

Each year the Air Force Reserve and Air National Guard are allocated their own undergraduate pilot training quotas. The quotas are relatively small. For example, from 1990 through 1996 the Air National Guard trained an average of 140 pilots annually.[103] The Air Force Reserve trained less than sixty.[104] Both the Air National Guard and Air Force Reserve believe these quotas must be increased for them to meet their pilot needs. Lieutenant Colonel Michael Turner, Chief of Rated Management for the Air National Guard, estimates that without increasing the UPT allocation quotas for the ARC the ANG alone would need to affiliate seventy-six percent of the projected USAF active component losses between FY 98 and FY 05 to fill ANG pilot authorizations.[105] Seventy-six percent is far above the already high fifty-two percent affiliation average experienced the last five years.[106] The Air Force Reserve estimates they would need to affiliate twenty-five percent of projected active duty pilot separations.[107] Without

additional ARC UPT quotas, 101 percent of projected active duty pilot losses are needed to keep reserve unit pilot authorizations filled.[108] Obviously, the ARC needs to increase its UPT quota, however filling those quotas may not be easy.

Even though the United States Census Bureau predicts a steady growth in the military eligible population through 2005, the desire for that population to serve in the military is suspect.[109] According to the 1997 Department of Defense Youth Attitude Tracking Survey, the propensity for military service among sixteen to twenty-four year-olds is at the lowest level since 1980.[110] Since 1977, the Youth Attitude Tracking Survey annually surveys by telephone 10,000 men and women between the ages of sixteen and twenty-four to determine their propensity to enter military service. Regarding the possibility of serving in a reserve component, only twenty percent of males and nine percent of females sixteen to twenty-one years old expressed interest in military service. The twenty-two to twenty-four years old category, those eligible for pilot training, expressed an even lower interest in reserve military service. Only thirteen percent of males and six percent of females would consider reserve duty.[111] Though flying military aircraft is an enticing incentive to join the reserves, population interest that low presents even the best recruiters with a significant challenge.

The recruiting challenge for the Air Reserve Component to fill their pilot needs through 2005 is formidable. Their primary source of pilot accessions, separating active duty pilots, is rapidly diminishing. Aggressive airline hiring may provide early security for ARC pilots, enticing them to leave the reserves. Given an increase in UPT quotas, the decreasing interest among youth eligible for military service reduces the pool of potential recruits. An additional challenge is the increase in separation rate experienced by the

ARC during the 1990s. This increased rate has been overcome by a higher than historic affiliation rate of separating active duty pilots. The required number of Air Force pilots needed to meet current and projected ARC manning levels will not be available at the turn of the century.

CHAPTER 4

RECOMMENDATIONS

The Air Reserve Component is a vital element in the Total Air Force structure. The Air National Guard and Air Force Reserve contribute potent combat power, and do it at significantly less cost than equivalent full-time active duty forces would cost. As an example, figure eleven shows the economic value of the Air Force Reserve. A robust and viable Air Reserve Component is a great benefit to the United States. This force has repeatedly proven itself in contingency operations during the 1990s.

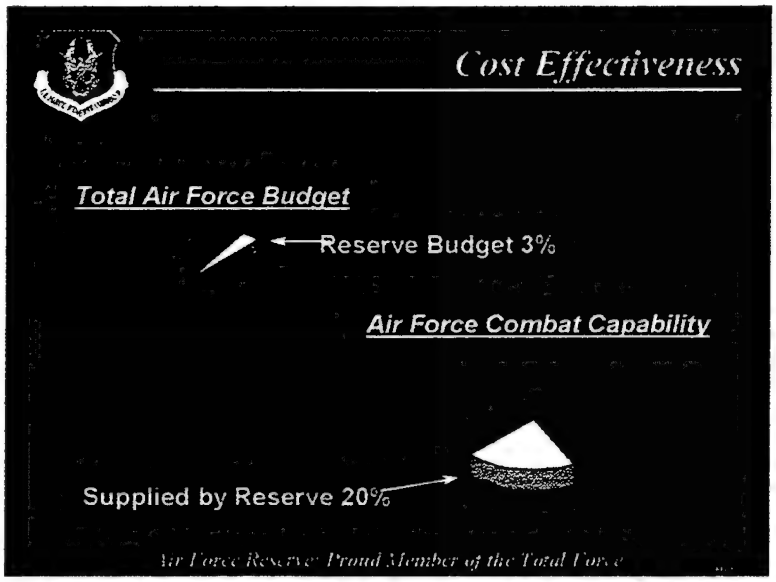

Figure 11[112]

The Air Reserve Component has also proven itself to be resilient in the face of unprecedented mission demands. The ARC participates in nearly every ongoing contingency involving the US Air Force. They no longer can be considered only a force

held in "reserve." The high operations tempo experienced in the 1990s has had minimal impact on personnel retention and recruitment. Surprisingly, in a survey of separating Air National Guard pilots and navigators conducted from 1 October 1993 to 30 June 1997, only sixteen out of 240 respondents (less than seven percent) stated their number one reason for leaving the ANG was real world mission deployments.[113] In fact, the ARC continues to take on new and demanding missions. In October 1998, the Air Force Reserve will establish an initial operating capability for the first reserve Airborne Early Warning And Control System (AWACS) squadron.[114] Serious effort should be made to support such valuable service and ensure the ARC remains capable of performing its assigned missions.

Following are three recommendations the author believes would help ensure the flying elements of the Air Reserve Component remain viable in the high operations tempo environment of today and expected in the early part of the next century. First, whenever possible, give the ARC mission type orders, then let them manage the accomplishment of those orders. Second, immediately increase the undergraduate pilot training slots allocated to both the Air Force Reserve and the Air National Guard. Third, active and reserve component commanders at all levels need to aggressively work to maintain or improve current retention levels. Accomplishing these three recommendations should enable the ARC to be intimately involved in future USAF contingency operations through at least 2005.

Mission Type Orders

The Air Reserve Component operates best when given mission type orders. Due to limited availability of their personnel, ARC units usually require more flexibility than their active duty counterparts. Tell them what they need to do, not how to do it, then let them manage mission accomplishment. A good example of ARC success when given mission type orders is the air defense of the continental United States, which is conducted entirely by Air National Guard forces. This alert mission must be conducted non-stop, twenty-four hours a day, 365 days a year. The ANG works within their aircrews' availability to schedule constant air defense coverage. When the active duty conducted this mission, their pilots were on alert a full week at a time. Air National Guard pilots are rarely on alert for a full week, simply because they are rarely available a full week at a time. Instead, pilots sit alert in shorter time periods like two or three days, yet constant coverage is achieved.

Mission type orders have great practicability in ongoing contingency operations. Active duty air units generally deploy for periods of forty-five to 120 days. ARC units cannot do that without activation. However, the ARC could cover an entire rotation period by rotating aircrews or units in shorter time increments, such as two weeks. This allows full time coverage, but not full time presence by a single individual or unit. Or, instead of providing the entire force for a period of time, ARC units could supply parts of a force continually. For example, if a deployment requires eight air refueling tankers, the ARC could be tasked to supply two or three continually. They would again manage their portion by rotating aircrews in short increments. When dealing with ARC units, USAF

commanders need to focus on mission accomplishment, the "what", and be less concerned with the method, the "how", of achieving success.

The costs associated with this type of operation are minimal when taken in the context of global operations. There are tangible costs associated with high personnel turnover in contingency operations. Fiscally, there is the cost to transport aircrews or move aircraft. However, these must be weighed against the benefits of reducing operations tempo in the active duty component, and keeping reserve component personnel up to date when operating in a contingency environment. Operationally, there is the cost of aircrew familiarity with the theater operating procedures and rules of engagement.

Current USAF communications capability permits many operational concerns to be overcome before arrival in theater. For example, operational briefings normally given after arrival in theater could be accomplished via secure video teleconference either immediately prior to leaving home station or on a regularly scheduled basis so reservists could work the briefings into their availability. Updates could be provided by secure communication immediately prior to leaving home station, or provided enroute if traveling by military aircraft. Units could direct operational study programs at home station rather than after arrival in theater. There are many ways, through modern communications, to prepare a reservist to begin operating efficiently as soon as possible after arrival. This is especially true considering ARC aircrews are some of the most experienced aircrews in the USAF.

In the case of long running contingency operations like Operations SOUTHERN WATCH, NORTHERN WATCH, and JOINT ENDEAVOR, many reservists have

already rotated through the operation several times, so their spin-up time is minimal. Giving the ARC mission type orders then letting them manage mission accomplishment benefits the reserve component by best matching member availability with mission requirements, and benefits the active component by reducing active duty operations tempo and increasing experience and currency in ARC units.

Increase ARC Pilot Training Quotas

Without additional UPT quotas allocated to the ARC immediately, the Air National Guard and Air Force Reserve will probably not be able to fill their pilot authorizations shortly after the turn of the century. A sufficient number of separating active duty USAF pilots is now available to replace losses. This available pool begins to shrink in 2000, after the last of the high UPT production level year groups are eligible to separate. The United States Air Force simply did not produce sufficient numbers of pilots to meet both active and reserve component requirements from 1992 through 1998.

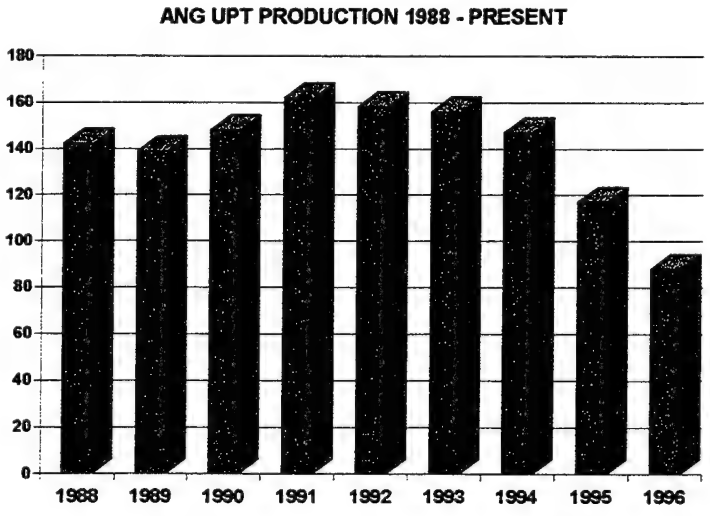

Figure 12[115]

The only way to solve the impending ARC pilot shortage is to immediately allocate more pilot quotas for direct hires to ARC units. Student pilots sent to UPT from ARC units incur the same eight year service commitment after graduation as their active duty counterparts. The reservist serves the majority of that commitment in a part-time, or traditional reserve status, but they are obligated to the unit for eight consecutive years. If a reserve pilot enters UPT in 1999 and graduates in 2000, the pilot would be available to the reserves until 2008. That coincides with the eligibility to separate from active duty for the pilots graduating from UPT in 2000. Increased USAF pilot production will reach sustainment levels in 1999, so an adequate number of active duty pilots would be available to replace separating reserve pilots in 2008 and beyond. Figure twelve shows Air National Guard pilot production from 1988 through 1996. The ANG estimates it needs at least 173 UPT allocations through FY 05, a doubling of 1996 production.[116] The AFR estimates it needs at least 65 UPT quotas in FY 99, 75 in FY 00, and 85 from FY 01 through FY 05.[117] The author believes these are minimum numbers. Increasing ARC pilot production immediately allows the Air Force Reserve and Air National Guard to weather the projected pilot shortfall from approximately 2001 to 2008. Failure to increase UPT quotas for the ARC means the ARC will not fill its over 8,000 pilot authorizations throughout the next decade.[118] If not fully manned, the ARC cannot sustain the operations tempo experienced since 1990, further compounding the active duty's operations tempo problem. The UPT quotas must be increased and sustained at least through FY 05, even if this means slightly reducing active duty pilot production.

Maintaining or Improving Current Retention Levels

The Air Force Reserve and Air National Guard cannot allow their retention levels to drop any further. The current level of retention must be maintained or improved for the Air Reserve Component to remain fully functional. The rates for separation prior to retirement eligibility and for retirement when first eligible are both rising slightly. This trend needs to be halted or reversed, particularly for pilots, because the replacement pool is already dwindling. Interestingly, the rate for retiring when first eligible increased more than the rate for separation prior to retirement. This most likely indicates a desire to remain in reserve duty until retirement is earned. It also could indicate a greater tolerance for high operations tempo among a new generation of pilots. Those retiring may remember the good old slower days and choose to retire quickly, while the new reservists have only known high operations tempo and accept it as routine business. Continued emphasis is needed to track and analyze operations and personnel tempo. The ARC must keep a clear picture of tempo to ensure participation requests do not exceed the ability or willingness of a dedicated reservist to meet the demand. Currently, the ARC appears to be operating near the maximum limit.

Impediments to high retention rates in the ARC must be discovered and removed. First, eliminate as much administrative demand on the traditional reservist as possible. The individual reservist should focus on operational not administrative requirements during their part-time service. Any administrative task that can be automated should be. Allow on-line access to administrative programs so reservists can access them when they are available, not just during standard business hours. Second, greater use of distance learning applications allows reservists to train on some tasks at their convenience and

reduces travel demands. This is particularly valuable for recurring training and testing activities. Distance learning opportunities should be aggressively pursued. At the same time, eliminate unnecessary training programs. Third, advance notice is often critical for reservists. Continue to advance scheduling protocols to achieve as much advance notice and scheduling flexibility as possible. This not only accommodates the reservist, but helps their civilian employer as well. In the 1990s high operations tempo environment, cooperative employers are nearly as valuable as reservists are.

ARC commanders should focus on the efficient, operationally oriented use of reservists' time. The goal of these suggestions is to reduce irritants and highlight positives as much as possible using innovative approaches. Reservists are dedicating so much time to reserve duty it is hard to consider them in the traditional, part-time way. Their time is valuable, so it should be used very efficiently when on reserve duty. Highly motivated, well trained reservists will be the result.

Summary of Recommendations

Air Reserve Component forces supplied an unprecedented proportion of United States Air Force contingency operations in the 1990s.[119] However, these are not simply active duty forces on call, they are reserve forces which must be dealt with differently than active duty forces. Reserve force use must be by design, not by afterthought. No longer can reserve forces only be considered after application of the active forces since the Air Force is a truly integrated Total Air Force. The USAF has done a masterful job, the model for all services, training and equipping the Air Reserve Component.[120] That accomplishment needs to be continued. Simultaneously, the Air Force must train its

leaders to exploit the Total Air Force from the inception of contingency planning, teaching them to understand the capabilities and constraints of both the active and reserve components. By giving mission type orders to ARC units, providing the ARC additional UPT allocations, and removing impediments to retention of highly qualified personnel, Air Force leaders will ensure the Air Reserve Components viability through 2010.

Commanders must understand the benefit of mission type orders when commanding reserve forces. They should concentrate on what needs to be accomplished and let the ARC figure out how to do it. Commanders should learn to exploit communications technology to prepare reserve forces to the maximum extent possible prior to arrival in a contingency theater. Additionally, all Air Force professional military education programs should include study of the difference between reserve and active forces, focusing on the integrated application of airpower components. The author has nearly twenty years of aviation experience dealing with ARC forces, including commanding them in Operations SOUTHERN WATCH and VIGILANT WARRIOR. In the author's opinion, the differences between the air reserve component and the active air component disappear on the battlefield. The differences occur in how the Air Force gets reserve forces to the battlefield and keeps their capabilities there. Effectively integrating without over tasking the Air Reserve Component is the challenge Air Force leaders in 1998 and early in the 21st century must face. Leaders providing mission type orders significantly help that integration and enhance the USAF's ability to deliver combat airpower globally.

An increase in ARC allocations for UPT should occur immediately to avoid pilot shortages in reserve units due to a rapidly diminishing number of pilots available to

separate from active duty. This is a relatively easy, short-term solution to a complex problem, a solution not requiring major adjustments in associated programs. Keeping a fully manned Air Reserve Component avoids potential over tasking of active duty air units. With the Total Air Force employing an effectively balanced active and reserve component force, the national security of the United States is enhanced because neither component is over tasked or under utilized.

Air Reserve Component commanders must efficiently use reservists' time to ensure highly qualified personnel remain in reserve service. Innovative application of distance learning technologies must be aggressively pursued to minimize travel burdens and time away from home, and maximally exploit the diverse times reservists are available. Administrative taskings must be minimized as much as possible to avoid burdening reservists with non-operational matters. Operations and personnel tempo rates must be continually analyzed to ensure reservists' ability to serve in a voluntary status is not exceeded. Planning as much in advance as possible helps keep volunteer rates high and avoids the problems of recruiting large numbers of replacements from dwindling resources. ARC commanders need to keep improving administrative and training efficiencies minimize the burden on traditional reservists allowing them to effectively use their limited time on operational activities. Improving retention rates also saves money by reducing training costs incurred when accessing replacement personnel.

The Air Reserve Component will continue to meet the high operations tempo demands experienced in the 1990s. Incorporation of the recommendations made in this monograph will ensure the Air Reserve Component remains a strong airpower force through 2010, and will improve an already outstanding active/reserve relationship. The

United States Air Force, by being a truly integrated Total Air Force, is better able to defend the United States through exploitation of air and space.

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